Caring for Crayon Enlargements

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Gerald R. Ford Conservation Center

About Crayon Enlargements

Many people have crayon enlargements (also known as crayon portraits) among their family archives but know little about them. These objects oftentimes serve as the only visual record of family ancestors. Unfortunately, crayon enlargements are usually composed of acidic materials that degrade over time, leaving the enlargement prone to structural damage and discoloration. The following provides some basic information on crayon enlargements and how to best preserve them.

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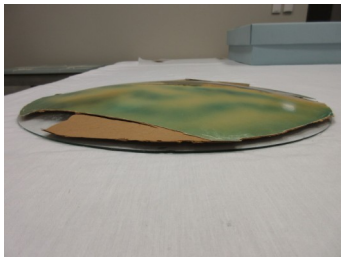
History of Crayon Enlargements

The crayon enlargement was invented in the mid-19th century and became the first photographic process that allowed for producing large scale or 'life-size' images of people. The medium requires a weakly produced photographic image printed onto paper; this sometimes appears very faint, while other times it appears as a strong, defined image. The image was then directly painted on using conte crayon, pastels, chalks, or watercolor. The purpose of applying media on top of the

photographic image was twofold; it evened out blemishes in the enlarged negative, such as scratches or tonal issues, and it allowed for an artistic effect that made the image appear hand-drawn.

For many people, this was the first affordable form of portraiture; this is also why the terms “crayon enlargement” and “crayon portrait” are used synonymously. Crayon enlargements commonly document wedding portraits, headshots of individuals, and family pictures. Crayon enlargements were also made of homesteads and properties. While the subject matter of crayon enlargements is varied, so is the skill level of the artists who made them. Like artists working in any medium, some were highly skilled while others were not so adept. This is most apparent in the handling and application of the media.

Characteristics and Condition Issues



The structure of crayon enlargements can vary. Many paper enlargements are lined onto canvas and stretched around strainers; others are mounted to convex paperboard backings (that look like cardboard) and are framed behind oval shaped glass. Others are mounted onto flat paperboard backings. Crayon enlargements can be oval-shaped or rectangular, two or three-dimensional, and black and white or color. The media can be heavily applied or used sparingly as an accent.

The paperboard backings of crayon portraits are made from poor-quality paper pulp containing lignin. Lignin is an acidic component in cellulosic materials that deteriorates rapidly, and is capable of transferring acids to nearby materials. It causes paper to become brittle and discolor to brown or yellow. Newspapers are also usually made from paper pulp containing lignin. Over time the poor-quality paperboard on these crayon enlargements becomes brittle and is easily torn or crushed. These damages often puncture the image layer. Enlargements on canvas can lose tension after years of environmental fluctuations resulting in distortions and tears in the image. These supports are also easily punctured.

Caring for Crayon Enlargements

Crayon enlargements have specific storage needs because their construction and the materials they are composed of make them more prone to damages. Proper storage in a stable environment can help to prevent damages and slow down the degradation process.

Storage

Each three-dimensional crayon enlargement should be housed in a separate acid-free, lignin-free, alpha cellulose storage box. Boxes protect items from light and atmospheric pollutants and also act as a buffer from fluctuations in the environment. The depth of the box must be taken into account, allowing for enough room around the entire object. If the convex glass from the original frame is present, this can be placed directly under the enlargement for support. If there is no original glass, the enlargement can be supported with a layer of gently rolled tissue placed beneath it. Either option will help to relieve mechanical stress on the crayon portrait that could cause distortions or tears. Another layer of tissue can be placed over the top of the enlargement.

Due to the acidic nature of the paperboard backing, opt for alkaline buffered, acid-free, lignin-free tissue (available from conservation suppliers). Two-dimensional crayon enlargements can be stored in the same manner, with tissue on both sides of the object, or inside of an acid-free, lignin-free, alpha cellulose folder. Multiple two-dimensional crayon enlargements of similar size can be stored in the same box, either interleaved with tissue, or in individual folders.

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Environmental Conditions

Optimal storage conditions will help to stabilize crayon enlargements and slow down the degradation process. Relative humidity levels in the range of 35-50% are thought to be best for paper-based materials. High humidity increases the risk of mold growth, while humidity that is too low may result in embrittlement of the paper, especially with delicate objects. Temperatures should be kept within a narrow, habitable range and should not exceed 72° F. Storage boxes containing crayon enlargements should be stored in a cool and dark space, such as a closet or desk in a living part of the house. Avoid storing these items in attics and basements where environmental fluctuations tend to be more drastic.

It is also important to protect paper objects from overexposure to light, which

exacerbates deterioration and causes discoloration. Ultraviolet light from the sun is extremely damaging to paper, but UV light is also emitted from indoor light sources, such as fluorescent bulbs. Exposure can be partially limited by using window shades and applying UV filtering films to windows, and sleeves to fluorescent lights. Remember: Light exposure is cumulative and the best way to protect paper-based objects is to keep them out of direct light (both natural and artificial) and limit the amount of time they are on display.

Display

Due to their complex and oftentimes delicate construction, it is best to consult a conservator for matting and framing advice. The safest solution is to display a copy of the original. A digital print can provide copies for display, and when framed, a color facsimile will look like the original. Displaying a copy saves the original from the irreversible damage caused by cumulative light exposure. Crayon enlargements can be duplicated by digital imaging; damaged or three-dimensional pieces cannot be duplicated by photocopying or scanning. This will exacerbate tears and losses and can easily crush a three-dimensional structural.

When duplicating original materials it is important to remember that photographers or processing technicians can damage items, as they are not always trained in special handling. Fragile items should be taken to a professional you trust. Consult a conservator to discuss local options for digital imaging.

Consulting a Conservator

With crayon enlargements it is often best to properly rehouse and store the original object and have high-quality digital images made for display. Conservation of these objects is usually a time-consuming and expensive process due to the severity of damages. It is important to note that because crayon enlargements are typically made from poor-quality materials, they will continue to degrade over time, despite interventive conservation efforts. Still, if you are interested in having a crayon enlargement conserved, consult a paper conservator to discuss treatment options.

Additional Resources

Aurora Missouri Historical Society. *Crayon Portrait*. Retrieved from https://auroramohistoricalsociety.wordpress.com/2009/02/23/crayon-portrait/

Conservation Center for Art and Historic Artifacts. *Crayon Enlargement*. Retrieved from http://www.ccaha.org/treatments/photographs/crayon-enlargement

Albright, Gary and Lee, Michael. (1989). "A Short Review of Crayon Enlargements: History, Technique, and Treatment." *Topics in Photographic Preservation*. Retrieved from http://resources.conservation-us.org/pmgtopics/1989-volume-three/03_05_Albright.pdf

Conservation Suppliers

Conservation Resources International
5532 Port Royal Road
Springfield, VA 22151
Toll free: (800) 634-6932
www.conservationresources.com
Archival housing/storage supplies, photographic supplies, general

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www.gaylord.com
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